IN THE SPECIFICATION

Please amend Paragraphs [0041] and [0067] in the specification as follows:

[0041] Fig. 4 shows an ~~analysis architecture~~ flow diagram <u>for the process</u> performed by the interactive graphics-based reliability analysis tool 28 shown in Fig. 2. In the analysis architecture flow diagram, a user uses the hierarchical representation component 30 to build a tree structure of a particular system and each of its subsystems and respective components at 38. Fig. 5 shows an example of a hierarchical representation of an aircraft. In this example, the aircraft is shown with three subsystems; an airframe, a propulsion system and a starting system. The hierarchical representation component 30 enables a user to model each subsystem into additional systems and their respective components. For ease of illustration, Fig. 5 only provides a representation of the propulsion system. In this example, the propulsion system has a power plant system, an engine, an ignition system, an air system, an airframe engine control system, an engine fuel control system, an engine indication system, an exhaust and thrust reverser system and an oil system. As shown in Fig. 5, each of these systems has their own components. For example, the engine is divided into a general section, a fan, a HP compressor, a combustor, a turbine and accessor drivers. Furthermore, each of these components has their own components. For example, see the components listed for the turbine. One of ordinary skill in the art will recognize that this hierarchical representation of the aircraft is an example and is not illustrative of all the ways of representing an aircraft. Furthermore, the interactive graphics-based reliability analysis tool 28 is not limited to an aircraft and can be used to analyze any complex system where it is desirable to improve quality and avoid reliability problems.

[0067] Fig. 16 shows a flow chart describing the processing operations associated with the Strategically Driven Maintenance (SDM) analysis set forth in Fig. 10d. The Strategically Driven Maintenance begins at 286 where the interactive graphics-based

reliability analysis tool sets k equal to the selected interval size. For example, k might be the time between scheduled shop visits, where the user must determine whether to replace the part in question or wait until the next scheduled shop visit. Next, the interactive graphics-based reliability analysis tool determines ~~ave at 288 which is~~ the expected life of the part ave using the following equation:

$$ave = a\int_0^{\infty} e^{-x}x^{1/b}dx$$

The interactive graphics-based reliability analysis tool then sets I equal to one and t equal to zero at 290 and determines y at 292, which is expected remaining life on the part after time t using the following equation:

$$y = ae^{(t/a)^b}\int_{(t/a)^b}^{\infty} e^{-x}x^{1/b}dx$$

The interactive graphics-based reliability analysis tool then determines at 294 *V(i)* and *W(i)*, which are the residual value of the part and the expected cost of an unexpected failure before the next schedule shop visit, respectively, using the following equations:

$$\text{V(i)} = \text{Cost of Part} * \text{y/ave}$$

$$\text{W(i)} = \text{Cost of Unscheduled SV} * \left\{1 - \exp\left[\left(\frac{t}{a}\right)^b - \left(\frac{t+k}{a}\right)^b\right]\right\}$$

where both Cost of Unscheduled SV (i.e., the general cost of an unscheduled shop visit) and Cost of Part are supplied as input by the user. The interactive graphics-based reliability analysis tool then determines at 296 whether *I* is less than the maximum number of intervals. If *I* is less than the maximum number of intervals, then the interactive graphics-based reliability analysis tool sets *i* equal to *I* plus one and *t* equal to *t* plus *k* at 298. Blocks 292-296 are repeated until the maximum number of intervals is greater than *i*. At this point, the interactive graphics-based reliability analysis tool then displays a graph of *V(i)* and *W(i)* at 300. If specified, the interactive graphics-based reliability analysis tool then puts the record in an output file at 302 and ends the Strategically Driven Maintenance analysis.